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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	1
10/624,253	07/22/2003	Lowell L. Winger	03-0781 1496.00317	7358	•
24319 75	590 11/09/2006		EXAM	INER	1
	LSI LOGIC CORPORATION 1621 BARBER LANE			RAO, ANAND SHASHIKANT	
MS: D-106	. Drive		ART UNIT	PAPER NUMBER	1
MILPITAS, C.	A 95035		2621		•

DATE MAILED: 11/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office Action Commence	10/624,253	WINGER ET AL.				
Office Action Summary	Examiner	Art Unit				
	Andy S. Rao	2621				
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the o	correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on						
	—· s action is non-final.					
3) Since this application is in condition for allowa		osecution as to the merits is				
closed in accordance with the practice under E	•					
Disposition of Claims	, , , , , , , , , , , , , , , , , , , ,					
4)⊠ Claim(s) <u>1-20</u> is/are pending in the application						
4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed.						
6) Claim(s) 1-20 is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/o	or election requirement.					
Application Papers						
··· _		•				
9) The specification is objected to by the Examine						
	10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.					
Applicant may not request that any objection to the		• •				
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
The oath or declaration is objected to by the Ex	kaminer. Note the attached Oπice	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in Application No						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)	_					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) B) Information Disclosure Statement(s) (PTO/SB/08)	Paper No(s)/Mail D					
Paper No(s)/Mail Date <u>7/22/03</u> .	6) Other:					

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DETAILED ACTION

Specification

1. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Prakasam.

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Prakasam discloses a method for decoding a bitstream (Prakasam: figure 6B), comprising the steps of: generating a first signal and a second signal (Prakasam: paragraph [0056], lines 1-4) by parsing a common slice in said bitstream (Prakasam: paragraph [0048], lines 1-13); generating a third signal by entropy decoding said first signal (Prakasam: paragraph [0043], lines 1-10); and generating a video signal by combining said second signal and said third signal (Prakasam: [0059], lines 1-6), as in claim 1.

Regarding claim 2, Prakasam discloses accepting said common slice containing a plurality of macroblocks encoded in a plurality of modes (Prakasam: paragraph [0090], lines 1-8), as in the claim.

Regarding claim 3, Prakasam discloses the sub-step of: renormalizing said entropy decoding by setting any one of a plurality of predetermined values as a last value for said entropy decoding (Prakasam: paragraph [0112], lines 1-6), as in the claim.

Regarding claim 4, Prakasam discloses terminating said entropy decoding by setting any one of a plurality of predetermined values as a last value for said entropy decoding (Prakasam: paragraph [0110], lines 1-13), as the claim.

Regarding claims 5-6, Prakasam discloses renormalizing said entropy decoding in response to said offset value being at least as large as said range value (Prakasam: paragraph [0116], lines 1-2), as in the claims.

Regarding claims 7-8, Prakasam discloses demodulating said second signal prior to combining with said third signal (Prakasam: [0101], lines 1-9), as in the claims.

Prakasam discloses apparatus (Prakasam: figure 4), comprising: a parser (Prakasam: paragraph [0057], lines 1-8) configured to generate a first signal and a second signal (Prakasam:

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paragraph [0056], lines 1-4) by parsing a common slice in a bitstream (Prakasam: paragraph [0048], lines 1-9); a decoder configured to generate a third signal by entropy decoding said first signal (Prakasam: paragraph [0058], lines 1-10); and a circuit configured to generate a video signal by combining said second signal and said third signal (Prakasam: paragraph [0059], lines 1-4), as in claim 9.

Regarding claims 10-11, Prakasam discloses that said arithmetic decoding comprises a context-based adaptive binary arithmetic decoding (Prakasam: paragraph [0005], lines 1-6; paragraph [0058], lines 1-4), as in the claims.

Regarding claim 12, Prakasam discloses using a demodulator configured to pulse code demodulate said second signal (Prakasam: paragraph [0101], lines 1-8), as in the claim.

Prakasam discloses an apparatus (Prakasam: figure 4), comprising: means for generating a first signal and a second signal (Prakasam: paragraph [0056], lines 1-4) by parsing a common slice in said bitstream (Prakasam: paragraph [0048], lines 1-13); means for generating a third signal by entropy decoding said first signal (Prakasam: paragraph [0043], lines 1-10); and means for generating a video signal by combining said second signal and said third signal (Prakasam: [0059], lines 1-6), as in claim 13.

Prakasam discloses a method for encoding a video signal (Prakasam: figure 1), comprising the steps of: generating a first signal and a second signal by parsing said video signal (Prakasam: paragraph [0056], lines 1-4); generating a third signal by entropy encoding said first signal (Prakasam: paragraph [0043], lines 1-10); and generating a video signal by combining said second signal and said third signal (Prakasam: [0059], lines 1-6) within a common slice (Prakasam: paragraph [0048], lines 1-13), as in claim 14.

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Regarding claim 15, Prakasam discloses generating said common slice using data in a plurality of modes (Prakasam: paragraph [0048], lines 1-10).

Regarding claim 16-17, Prakasam discloses renormalizing said entropy encoding by setting any one of a plurality of predetermined values as a last value for said entropy encoding (Prakasam: paragraph [0116], lines 1-2), as in the claims.

Regarding claim 18, Prakasam discloses terminating said entropy encoding by setting any one of a plurality of predetermined values as a last bit for said entropy encoding (Prakasam: paragraph [0110], lines 1-13), as the claim.

Regarding claim 19, Prakasam discloses modulating said second signal by pulse code modulation (Prakasam: paragraph [0101], lines 1-9), as in the claim.

Regarding claim 20, Prakasam discloses generating a fourth signal and a fifth signal (Prakasam: paragraph [0056], lines 1-4) by parsing a common slice in said bitstream (Prakasam: paragraph [0048], lines 1-13); generating a sixth signal by entropy decoding said first signal (Prakasam: paragraph [0043], lines 1-10); and generating a video signal by combining said fifth signal and said sixth signal (Prakasam: [0059], lines 1-6), as in the claim.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Marpe discloses an apparatus and method for entropy encoding or entropy decoding using an initialization of context variables. Pang discloses a two pass architecture for a H.264 CABAC decoding process.

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5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andy S. Rao whose telephone number is (571)-272-7337. The examiner can normally be reached on Monday-Friday 8 hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on (571)-272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Andy S. Rao Primary Examiner Art Unit 2621

asr November 8, 2006 PRIMARY EXAMINER

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